11-19-04

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TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT OF E Under 37 CFR 1.97(b) or 1.97(c))				Docket No. 14321.55			
In R	In Re Application of Koichi Takiguchi, et al.						
. A	Application Filing Date Examiner Customer No. Group Art Unit Confirmation No.						
	10/6	614,637	07/07/2003	Unassigned	022913	2874	7656
Titl	le:	CHARACTI	ERISTIC ADJUSTM	ENT METHOD OF MULTISTA	AGE MACH-ZE	EHNDER INTER	FEROMETER
		TYPE OPTI	CAL CIRCUIT				
	Address to:  Commissioner for Patents  P.O. Box 1450  Alexandria, VA 22313-1450						
				37 CFR 1.97(b)			
1.	1. A The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.						
				37 CFR 1.97(c)			
2.		The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:					
		☐ the s	statement specified in	n 37 CFR 1.97(e);			
				OR			
☐ the fee set forth in 37 CFR 1.17(p).							
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TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (Under 37 CFR 1.97(b) or 1.97(c))				Docket No. 14321.55		
In Re Application: Koichi Takiguchi, et al.						
Application No. Filing Date	Examiner	er Customer No.		Confirmation No		
10/614,637 07/07/2003	Jnassigned	022913	2874	7656		
Title: CHARACTERISTIC ADJUSTMENT MET TYPE OPTICAL CIRCUIT	HOD OF MULTIST	AGE MACH-Z	EHNDER			
Payment of Fee  (Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p  A check in the amount of is attached.  The Director is hereby authorized to charge and credit Deposit Account No. 23-3178 as described below.  Charge the amount of Credit any overpayment.  Charge any additional fee required.  Payment by credit card. Form PTO-2038 is attached.  WARNING: Information on this form may become public. Credit card information included on this form. Provide credit card information and authorization on PTO-Certificate of Transmission by Facsimile*  Certificate of Transmission by Facsimile*  I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Postal Service was first class mail in an environment and Trademark Office (Fax. No.  (Date)  Signature  *This certificate may only be used if paying by  deposit account.  *This certificate may only be used if paying by  *This certificate may only be used if paying by  Battle November 18, 2004  Dated: November 18, 2004				ng deposited cient postage ddressed to exandria, VA		

- (2F)						
CORTIFICAÇE OF	Docket No.					
Applicant(s); Keithi T	14321.55					
Application N	Filing Date	Examiner	Customer No.	Group Art Unit		
THE WORLD	07/07/2003	Unassigned	022913	2874		
	Invention: CHARACTERISTIC ADJUSTMENT METHOD OF MULTISTAGE MACH-ZEHNDER INTERFEROMETER TYPE OPTICAL CIRCUIT					
I hereby certify that	the following corresponde	ence:				
Listing all Cited Refe	Transmittal Letter (2 pgs, in triplicate); Supplemental Information Disclosure Statement (2 pgs); Form PTO-1449 Listing all Cited References (2 pgs); Legible Copies of Five (5) Cited References; postcard; and Certificate of Express Mailing Label No. EV 485 808 729 US					
	(1	dentify type of correspondence)				
is being deposited w	vith the United States Pos	stal Service "Express Mail Post Office	to Addressee" s	ervice under 37		
CFR 1.10 in an enve	elope addressed to: Com	missioner for Patents, P.O. Box 1450	, Alexandria, VA	22313-1450 on		
	November 18, 2004					
_	(Date)					
		Kelli (				
(Typed or Printel Yame of Person Mailing Correspondence)						
(Signature of Person Mailing Correspondence)						
EV 485 808 729 US						
("Express Mail" Mailing Label Number)						
Note: Each paper must have its own certificate of mailing.						

PATENT APPLICATION
Docket No: 14321.55

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

18 18 plication of		)
	Koichi Takiguchi, et al.	)
Serial No.:	10/614,637	) Art Unit
Filing Date:	July 7, 2003	) 2874
Confirmation No.:	7656	)
For:	CHARACTERISTIC ADJUSTMENT METHOD OF MULTISTAGE MACH-ZEHNDER INTERFEROMETER TYPE OPTICAL CIRCUIT	) ) )

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97

Commissioner for Patents PO Box 1450 Alexandria, Virginia 22313-1450

Sir:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). While no representation is made that these references may be "prior art" within the meaning of that term under 35 U.S.C. §§ 102 or 103, the enclosed listed references are disclosed so as to fully comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record believes that the enclosed art is the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

In accordance with 37 C.F.R. §§ 1.97 and 1.98, a copy of each of the listed references or relevant portion thereof that is not a US patent document is also enclosed.

# Statement of Relevance of References Listed Unaccompanied by English Translation Under 37 CFR § 1.98(a)(3)

In accordance with 37 CFR § 1.98(a)(3), the following concise explanation of the relevance of each listed reference that is not in the English language and unaccompanied by a translation into English is provided.

Japanese Publication No. JP 07209090 discloses:

PURPOSE: To provide an optical circuit evaluating method, which can accurately measure phase change and optical power distribution quantity to be given to the light transmitting each optical wave guide path inside of an interference type optical circuit having optical wave guide paths at a different length from each other.

CONSTITUTION: A testing interference type optical circuit is located inside an interferometer using a light source having a coherent length shorter than a difference of the optical path length between any two optical wave guide paths of the optical circuit to generate the separate beat signal (s1), and each beat signal is extracted as a function of a difference of optical path length (s2), and Fourie transformation is performed (s3) to obtain each phase and each amplitude. Phase and optical power distribution quantity in each optical wave guide path is thereby obtained.

Dated this 18<sup>th</sup> day of November, 2004.

Respectfully submitted,

ERIC M. KAMERATH Attorney for Applicant Registration No. 46,081

Customer No. 022913

EMK:kc

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Form PTO-1449

Applicant:

Koichi Takiguchi, et al.

Confirmation No.: 7656

Sheet 1 of 2

Serial No.:

10/614,637

Att'y Docket No.: 14321.55

Filing Date: For:

07/07/2003

Group: 2874

CHARACTERISTIC ADJUSTMENT METHOD OF MULTISTAGE MACH-ZEHNDER INTERFEROMETER TYPE OPTICAL CIRCUIT



### INFORMATION DISCLOSURE CITATIONS MADE BY APPLICANT

FIRST TRADE		U.S. Patent Documents	3		
Examiner <u>Initial*</u>	Document <u>Number</u>	Issue <u>Date</u>	<u>Nam</u>	<u>e</u>	
		Foreign Patent Documer	<u>nts</u>		
Examiner <u>Initial</u> *	Document Number	Publication	Country or Patent Office	Translation	
1	JP 7209090	11/08/1995	Japan	Abstract only	
		Other Documents (including author, title, pertinent pa	ges, etc.)		
Examiner <u>Initial</u> *					
2	OFFREIN, B. J., et al., "Adaptive Gain Equalizer in High-Index-Contrast SiON Technology," <i>IEEE Photonics Technology Letters</i> , IEEE Inc., New York, US, Vol. 12, No. 5, May 2000, pp. 504-506				
3	WACOGNE, B., et al., "Double Security Level in a Telecommunication System Based on Phase Coding and False Data Transmission," <i>Journal of Lightwave Technology</i> , IEEE, New York, US, Vol. 14, No. 5, May 1996, pp. 665-670				
4	TAKIGUCHI, K., et al., "Variable Group-Delay Dispersion Equalizer Using Lattice-Form Programmable Optical Filter on Planar Lightwave Circuit," <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , IEEE Service Center, US, Vol. 2, No. 2, June 1996, pp. 270-276				
5	TAKADA, K., et al., "Measurement of phase error distributions in silica-based arrayed-waveguide grating multiplexers by using Fourier transform spectroscopy," <i>Electronic Letters</i> , IEE Stevenage, GB, Vol. 30, No. 20, 29 September 1994, pp. 1671-1672				
Examiner:		Date Considere	ed:		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609, draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449

Applicant:

Koichi Takiguchi, et al.

Serial No.: 10/614,637

Filing Date:

For:

07/07/2003

Confirmation No.: 7656

Att'y Docket No.: 14321.55

Group: 2874

Sheet 2 of 2

CHARACTERISTIC ADJUSTMENT METHOD OF MULTISTAGE MACH-

ZEHNDER INTERFEROMETER TYPE OPTICAL CIRCUIT

#### **References Cited by Applicants**

While the filing of Information Disclosure Statements is voluntary, the procedure is governed by the guidelines of Section 609 of the Manual of Patent Examining Procedure and 37 C.F.R. §§ 1.97 and 1.98. To be considered a proper Information Disclosure Statement, Form PTO-1449 shall be accompanied by a copy of each listed patent or publication or other item of information and a translation of the pertinent portions of foreign documents (if an existing translation is readily available to the applicant), an explanation of relevance of each reference not in the English language, and should be submitted in a timely manner as set out in MPEP Sec. 609.

Examiners will consider all citations submitted in conformance with 37 C.F.R. § 1.98 and MPEP Sec. 609 and place their initials adjacent the citations in the spaces provided on this form. Examiners will also initial citations not in conformance with the guidelines which may have been considered. A reference may be considered by the Examiner for any reason whether or not the citation is in full conformance with the guidelines. A line will be drawn through a citation if it is not in conformance with the guidelines AND has not been considered. A copy of the submitted form, as reviewed by the Examiner, will be returned to the applicant with the next communication. The original of the form will be entered into the application file.

Each citation initialed by the Examiner will be printed on the issued patent in the same manner as references cited by the Examiner on Form PTO-892.

The reference designations "A1," "A2," etc. (referring to Applicant's reference 1, Applicant's reference 2, etc.) will be used by the Examiner in the same manner as Examiner's reference designations "A," "B," "C," etc. on Office Action Form PTO-1142.

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Examiner:

Date Considered:

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609, draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.